Sustainable Mobility

Changing perspectives: A sustainable approach to international mobility

I.   Introduction

The University of Applied Sciences Utrecht (HU) is committed to sustainability and has specific attention for sustainable mobility[1]. The attention for sustainable international mobility is part of this broader movement towards sustainable mobility, which until now has been mainly focused on domestic mobility by stimulating the use of public transport and bicycles instead of cars, use of electric HU loan cars, spreading work and travel times, and the ability to work from home.

Making travelling abroad sustainable aims to motivate those involved in international travel for the HU to minimise greenhouse gas emissions from business/study trips. The aim is 'to travel responsibly': to analyse the necessity in light of the objectives and to travel as sustainably as possible. Increasing the sustainability of international mobility is expressly not intended to prohibit or discourage travel when considered important and relevant. Rather, the goal is for a balance to be found between the reduction of CO_2 emissions and the importance of international mobility in our education and research.

Sustainability and international mobility are at odds with each other, but it is also in cooperation with the HU's international partners that a positive impact can be achieved in many areas. This document will elaborate on several factors which should be taken into consideration by students and employees when planning their international mobility, to support the process of making an informed decision. Several options can be implemented directly, while others will require further elaboration.

This document serves as a guideline. It is a co-creation with input from many internal and external colleagues, contacts and students. Among others from: Green Office, International Office, education and research stakeholders, Education Logistics, R&D Department, VCK Travel, Utrecht University and the National Network for Internationalisation of Universities of Applied Sciences - HIB.

II.   Background

University of Applied Sciences Utrecht and sustainability

The HU considers working on sustainability an important duty[2]. Inspired by the 17 United Nations Sustainable Development Goals (SDGs), sustainability plays a key role in our education, research and business operations[3]. One of HU's goals is to reduce its carbon footprint to zero by 2030. Employee mobility accounts for 75% of HU's total carbon footprint and has been the largest emitter for years. The share that centrally booked business flights have in this is 9.5% (self-booked trips are not included). In addition, also students fly abroad for study or traineeship purposes. The harmful effects of air travel require the HU to promote sustainable travel behaviour and to discourage air travel when suitable alternatives exist.

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[1] Sustainable HU - mobility https://husite.nl/duurzaam/duurzame-hu/bedrijfsvoering/mobiliteit/
[2] HU Sustainable actions: https://husite.nl/duurzaam/duurzame-hu/
[3] Sustainable initiatives: https://husite.nl/duurzaam/duurzameprojecten/

In order to reduce the HU's total CO_2 emissions (4,705 tonnes in 2019), we will face enormous challenges in the coming years in the areas of mobility, heat and waste. One way we can contribute to this is by making travelling abroad more sustainable, especially in relation to air travel. At HU, there are two options for booking an official trip abroad: book and claim expenses for the trip yourself or book through travel partner VCK Travel, which will charge the expenses to HU[4]. For centrally booked flights, HU has been making a contribution to a carbon offset of around €5 per tonne of CO_2 since 2016. Air travel is reported in the carbon footprint with a net emission of zero. However, there is still much scientific debate[5] about the real price of a tonne of CO_2.

The Netherlands and the EU

The government endorses the added value of, and strong commitment to, cross-border cooperation and educational mobility in higher education[6]; incoming and outgoing mobility are part of this. The Netherlands also supports the European commitment to inclusion, research and innovation and the digital[7] and green[8] transition. The various themes are all important and require careful consideration in order to achieve a good balance between sustainability and mobility in cross-border cooperation.

HU education and research

Within the HU, international orientation, international cooperation and mobility also form an important part of our own education and research. Thanks to projects around the SDGs, research and professional networks and grant programmes such as Horizon and Erasmus+, we are in close contact with international partners and approach professional practice from an international perspective. In addition, current and urgent *global challenges* such as climate change and the Corona crisis make us dependent on each other at a global level. This calls for international cooperation and the sharing of knowledge: *think global, act local*. We often do this digitally, but physical meetings and site visits also form an important contribution to achieving our goals.

In short: International cooperation and mobility are part of our education and research, and making travel more sustainable concerns both the conscious and responsible handling of travel itself ('is the trip necessary') and the mode of transport ('how do I travel as environmentally-friendly as possible').

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[4] List of maximum rates - accommodation costs;
https://www.sso3w.nl/travelpoint/documenten/regelingen/2021/06/07/tarieflijst-verblijfkosten-buitenlandse-dienstreizen-per-juli-2021
[5] https://news.stanford.edu/2015/01/12/emissions-social-costs-011215/
[6] From: Council conclusions on the European Universities Initiative (EYCS Council, 17-18 May '21)
[7] https://education.ec.europa.eu/document/digital-education-action-plan
[8] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

III.   Sustainable travel behaviour

Responsible travel

Whether a trip is necessary is a decision to be made at the discretion of the traveller concerned and those directly involved (such as the manager, supervisor of a study trip and/or the organising party for whom the employee will be making a contribution/visit). It requires conscious consideration of the situation and possible alternatives. Questions that need to be answered when making conscious choices include:

- Do I have to be there physically or can I take part digitally?
- If multiple people are travelling: can we travel with fewer people?
- Do I travel by train, (electric) car, plane?
- If air travel is necessary: is there a direct flight, is carbon offsetting possible?
- How many days can/should I be away and are there any trips/destinations that can be combined?
- How do I use my trip as efficiently as possible and is there anything I can do for my colleagues in this respect?

The aim of considering these things is not to mark trips as necessary or unnecessary in advance, but to realise and learn that we have to consider better alternatives for achieving our objectives in each trip, as well as the necessity of each trip itself.

Three measures

By making travel more sustainable, we aim for 'responsible travel' and focus on three important measures to make sustainable travel behaviour the norm:

1. **Travelling less**
2. **Travelling differently**
3. **Travelling efficiently**

1. Travelling less

Of course, the most sustainable solution for reducing emissions from air travel is to fly less. As mentioned earlier, there are many reasons why employees and students choose to travel by plane. It is often the fastest and/or cheapest option and sometimes even the only way to reach a destination. But it is by no means always necessary to fly or even to travel, as suitable alternatives might be available. Digital tools are increasingly being used as an alternative to travel: online international cooperation has been given an enormous boost by the Corona pandemic and it also has an important place on the (digital) agendas of the EU and (higher) education institutions. Another method to fly less is to stick to a maximum number of kilometres flown, based on your total CO_2 emissions per year. This may mean that you can fly one year but not the next. Awareness of the alternatives among employees is the most important driving force for making travel more sustainable.

2. Travelling differently

If travel is deemed necessary, the traveller should consider the most appropriate mode of transport. Trains are often a good alternative to air travel for a destination within Europe. We use the Train Zone Map of Utrecht University[9] (also refer to Annex 1) to outline this. The map provided by Railteam[10] High Speed Europe also shows the options clearly and schematically.

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[9] Utrecht University Train Zone Map https://www.uu.nl/sites/default/files/treinzonekaart-nl-v2.pdf
[10] Railteam High Speed Europe https://www.railteam.eu/en/for-your-journey/network-map/

The train zone (Annex 1) shows destinations in an area around Utrecht where the train is preferred over the plane, considering three zones:
- a zone with a 200km radius where travelling by plane is not an option;
- a zone where travelling by train is always preferred;
- a zone with a 700 km radius.

The colour-coded map also indicates more and less favourable train destinations based on a number of factors.

Besides trains, electric vehicles can also be a good alternative to air travel. For trips closer to home, also consider the bus, tram, sharing a taxi, and carpooling.

Making an informed decision is also key when it comes to the mode of transport chosen. The essence is that we realise and learn that if the trip is considered necessary, we critically consider what the most environmentally-friendly mode of transport is and whether there are any valid reasons for deviating from it.

3. Travelling efficiently

If an employee chooses to fly, due to longer distances and after considering the options under 1 and 2, it is still possible to make the trip as efficient as possible. For example, choose a direct flight without stop overs and an airline that provides a carbon offset for CO_2 emissions. Coordinate travel movements, combine destinations and activities where possible and match your schedule to that of colleagues you may have with similar travel plans; you might be able to achieve the same objectives with fewer people. Less travel movements means a more sustainable trip.

Here, too, a well-founded decision is key. The essence of the matter is that we critically consider what the most environmentally-friendly travel planning is in terms of time, route and number of travellers and whether there are valid reasons for deviating from these.

IV.   **Exemplary function**

This guide for making travel more sustainable is primarily aimed at HU employees. In addition, we focus on providing information to students, for example in the preparatory phase for activities abroad (raising awareness). We also refer to the possibilities offered by Erasmus Green Mobility[11] and other tips for a sustainable experience abroad[12]. In activities where employees travel together with students such as study trips, we as an organisation have an exemplary role. As sustainable choices can have an impact on costs and time, different scenarios should be further developed into concrete cases in order to achieve suitable, feasible facilitation and support.

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[11] https://youthnetworks.net/green-transportation-will-be-supported-by-erasmus-from-2020/
[12] Go Green: https://www.erasmusplus.nl/green-erasmus

V.   Implementation

In principle, we start with conscious travel and making the right decisions. However, in order to embed this in the HU organisational culture as desired behaviour (standard), several activities and process changes are also necessary. The following facilities and actions, among others, will be necessary to successfully implement sustainable travel and require further elaboration:

-   Awareness campaign for staff and students > i.a. by students
-   Realistic carbon offsetting in relation to true pricing
-   Alignment with claims policy: self-booked trips in accordance with the same principle
-   Digital facilities online and hybrid activities > developing, improving ICT facilities
-   Agreements with VCK and portal design: sustainable alternative first
-   Making the train provider visible: simplifying train travel
-   Electric car: investigating user needs in relation to international travel
-   Elaborating on facilitation and support for students/combination trips for employees and students

This elaboration will be further taken up by the colleagues involved of various HU departments and translated into a concrete action plan.

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Annexes: UU Train Zone Map

Annex 1 UU Train Zone Map

Train zone

Most destinations within a 700 km radius of Utrecht can be reached easily by train, according to our own comparison of travelling by train and plane for a large number of European cities. The map below shows the UU train zone. The circles around Utrecht indicate, from the centre outwards:

1.   a zone with a 200km radius where the plane is not an option;
2.   a zone where the train is always preferred;
3.   a zone with a 700 km radius.

As there are large differences in train accessibility per city, a division has been made between cities where the train is always (green) or mostly (orange) preferred and less favourable train destinations (red), based on travel time, price, opportunity to work on the train, number of changes and emissions. Of course, any city of any size can be reached by train. Also refer to:
https://www.uu.nl/sites/default/files/treinzonekaart-nl-v2.pdf

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